

ABSTRACT OF THE DISCLOSURE

Vectors and Viral Vectors, and Packaging Cell Lines for Propagating Same

Provided are novel vectors and viral vectors capable of expressing exogenous gene or exogenous nucleic acid sequences in a target cell of interest, such as T cells, bone marrow cells, epithelial cells, liver cells and the like. The nucleic acid components of the vectors may include one or more native promoter/enhancer regions having modified sequence segments, one or more non-native promoter/enhancer or non-native promoter's gene or gene segment, and a native viral vector terminator or processing signal or segment thereof. The viral vectors comprise a virus or viral portion having on the surfaces or envelopes adsorption components, one for a packaging cell line and the other for delivery to a target cell. Other viral vectors provided by this invention have two components on their surfaces or envelopes, one of which is native to the virus and the other being non-native and capable of adsorbing to the target cell while being incapable of adsorbing to a native cell for the viral vector. Packaging cell lines for propagating the vectors and viral vectors are also provided, as are novel processes for propagating any of the disclosed vectors or viral vectors.